

Liberty Utilities (EnergyNorth Natural Gas) Corp. &  
Liberty Utilities (Granite State Electric) Corp.  
Response to Liberty Consulting Group Final Report

## I. Introduction

Liberty Utilities (EnergyNorth Natural Gas) Corp. and Liberty Utilities (Granite State Electric) Corp. (hereinafter Liberty Utilities or LU) provide their comments on the Final Report on a Management and Operations Audit of the Customer Service and Accounting Functions of Liberty Utilities submitted by Liberty Consulting Group (LCG) to the New Hampshire Public Utilities Commission on August 12, 2016.

LCG was engaged by the New Hampshire Public Utilities Commission to conduct a targeted audit of LU as provided in a settlement agreement negotiated during the spring of 2015 and approved by the Commission on June 26, 2015 in Docket No. DG 14-180 (EnergyNorth rate case). Over the course of approximately six months, LCG conducted approximately 75 interviews with employees in both New Hampshire and in corporate offices located in Oakville, Ontario. In addition, LU responded to nearly 300 data requests from LCG.

The audit sought to give insight to the Commission Staff on LU's performance in the areas of customer service and finance after LU's acquisition of EnergyNorth and Granite State from National Grid in July 2012. Because Granite State and EnergyNorth were operated on systems that were commonly used by all the National Grid utilities, LU had to purchase, build and implement all of its own systems from the time it acquired EnergyNorth and Granite State. This process was underway from the summer of 2012 until September 2013 for EnergyNorth, and July 2014 for Granite State in transition processes that were regularly reported on to the Commission Staff. As part of the acquisition agreement, LU and National Grid entered into a series of Transition Service Agreements (TSAs) pursuant to which National Grid continued to provide various services for LU until such time that LU was able to assume each service. The last of those TSAs terminated in September 2014. Thus, it was not until October 1, 2014 that both companies operated independent of National Grid. After the cutover from the National Grid systems, EnergyNorth and Granite State worked diligently to remedy issues that arose during the period. In the spirit of continuous improvement and good business practice, during 2015, LU conducted an internal meter-to-cash audit to identify any outstanding issues with its systems and processes. By the second quarter of 2016, LU had remedied all of the issues it self-identified in that audit. As reflected in LCG's report and in our comments below, Liberty Utilities has resolved nearly every issue identified, with resolution of the few remaining issues nearing completion. We believe it is important to note that prior to the LCG audit, LU was aware of and working hard to resolve nearly all of the issues described in the LCG report. LU's current circumstances are much different and significantly improved as compared to the conditions that existed in the spring of 2015, reflecting an organizational drive to continually improve and provide quality service to LU's customers.

The following provides LU's comments on some of the conclusions and recommendations contained in LCG's report.

## II. Customer Service



In 2015, LU's Facilities Management department began assessing the Company's four walk-in center locations to determine appropriate improvements to enhance safety. LU completed this physical security assessment in Q1 2016 and is in the process of implementing a plan to enhance safety at those locations. Modifications to physical security include, but are not limited to the installation of floor-to-ceiling bullet-proof glass, walls and doors in each walk-in center, reflective privacy coatings on external windows and doors, and secure locations for safes. The Company expects these modifications to be completed by the end of 2016.

**Conclusion #20: Management does not process customer payments consistently or timely.**  
**Recommendation #2: Stream-line payment processing to reduce delays and properly credit accounts.**

LU has been working diligently to reduce its payment processing time, and has identified other opportunities for improvement, as described below:

- LU will continue outreach to customers who use incorrect account numbers or incorrect payment mailing address, or who do not include the payment coupon, or do not use the correct payee on their checks.
- LU will be implementing an automated process for uploading payment files. Below is a table showing the processing time that will be implemented. This should be in place by end of Q3.

Channel	New Hampshire Payment File Timing			
	Payment Cut Off	File Pulled from Fiserv	Available for Finance to Post to Cogsdale	
Walk In (WIP)	Payments Made By 4pm CST Monday to Friday	3:20 AM	4:20 AM	Next Day
On Demand (ODP)		6:30 PM	7:50 PM	Same Day
Lockbox (LBX)		7:30 PM	9:06 PM	Same Day
Electronic (EP)		6:30 AM	7:15 AM	Next Day

- In August 2015, LU implemented same day processing for online unbankables.
- LU is determining the cost of obtaining deposit scanners for each Walk-in Center. This will allow LU to process customer check payments daily as a remote deposit to its financial institution. Implementation is planned for the end of 2016.

**Conclusion #6: Offering agent-assisted credit/debit card processing in the Contact Center and walk-in locations increases PCI compliance and employee fraud risks.**

**Recommendation #3: Cease phone recordings of credit/debit card payments calls and cease accepting rep-assisted payments or at a minimum, limit payment acceptance to a select group of representatives to minimize risk.**

Listed below is the remediation action plan and an update on the tasks completed or in-progress:

1. As of May 5, 2016, Contact Centers and Walk-in Centers have ceased processing credit/debit card payments.
  - a. All requests for credit/debit card payments over phone are directed to BillMatrix (a PCI DSS compliant payment processor) for payment processing
  - b. Customers wanting to pay by credit/debit cards at our walk-in offices are also directed to Bill Matrix
  - c. The LU team is finalizing the plan to implement encrypted handheld terminals (point to point encryption (P2PE) terminals) to eliminate web agents (virtual terminals) to further minimize risks. The implementation is expected to be completed by December 31, 2016.
2. LU's collections team (only a select group - 3 representatives) still continues to collect card payments over the phone for delinquent accounts.
  - a. The collections team utilizes an unrecorded phone line
  - b. Credit/debit card information is collected and processed in real time using BillMatrix secure web agents (virtual terminals)
  - c. No credit/debit card information is stored on LU systems
3. All credit/debit card payments over the internet (using e-commerce website) are entirely handled by BillMatrix. LU does not collect, store, process or transmit credit/debit card payment information using its own website or IT infrastructure
4. As of June 2016, LU has implemented internal and external vulnerability scanning and remediation (patch management) process. All internal and external systems are scanned using an industry leading vulnerability scanning tool and vulnerabilities are remediated using a risk based criteria. All systems are scanned on a weekly basis.

**Conclusion #4: Employee feedback surveys reveal opportunities to improve employee satisfaction and engagement.**

**Recommendation #4: Continue to improve customer service hiring practices and working environments to facilitate higher retention and employee engagement.**

In 2014 and 2015, Customer Service Representatives were initially hired as temporary labor and then converted to permanent employees. In January 2016, the Customer Care organization shifted to a direct hire model to: 1) increase the quality of new-hire candidates; and 2) reduce the release of candidates during the initial training period. In 2015, roughly 50% of new-hire temporary employees were released in the first 1-20 days of training. As a result of the implementation of the direct hire model, LU anticipates that the number of new-hire employees released during the training period will decrease, which is expected to improve satisfaction and engagement.

With respect to the employee survey, LU has received preliminary results for employee engagement based on the survey that was conducted in June 2016. Those results show a significant increase in

employee engagement to 63% (as compared to 50% in the 2015 survey). We are proud of these results and look forward to continue to build and improve on this success. We would note that these results compare favorably to the US industry average results of 61%, based on the Aon Hewitt Employee Research database.

**Conclusion #8: Call handling quality has not been measured consistently or comprehensively and sampling that has occurred has evidenced a breadth of problems.**

**Recommendation #5: Improve the quality of service provided to customers.**

The importance of quality monitoring and ensuring high quality service is recognized throughout the organization. As of May 2016, a call monitoring program has been incorporated into our Calabrio Call Recording system. Using this online method will allow more reporting capabilities for both individual performance and team performance.

LU's average quality scores have improved in the last 12 months. Average quality scores in the last six months of 2015 were 76%, and increased to 84% during the first six months of 2016. Topic specific training sessions are held on one Saturday of each month. In addition, LU is implementing or has implemented the following:

- Our evaluation form includes a section referencing “providing correct information, following our Tariff and current rules” as noted in a response to one of LCG’s data requests. The performance metric could be broken out into more detailed sections, and the weighting of each section could be assessed for opportunities to improve quality in specific areas. As in most call centers, the evaluation form is a living document and thus the weighting will change from time to time based on the CSR development. A new form will be implemented by end of Q3 2016.
- LU has allocated a dedicated FTE to quality monitoring.
- The Manager will begin formally observing coaching sessions with the CSR and Supervisor/Trainer. CSRs will be coached accordingly.
- The Human Resource department has observed the Manager’s coaching sessions and provided feedback.
  - Training for the Trainer included a Training Certificate program in October 2015.
  - Training for the Supervisors and Manager has included attending Supervisor workshops through the University of New Hampshire.
  - Customer Service Supervisors have attended Leadership Seminars sessions internally at LU.
  - LU Specific training module on coaching will be rolled out in August 2016.

**Conclusion #16: LU-NH’s Balanced Scorecard does not measure the same billing metrics as reported to the Commission.**

**Recommendation #6: Review and revise billing performance metrics to be more reflective of operational performance and track billing performance consistently between the Balanced Scorecard and the metrics reported to the NHPUC.**

LU does not agree with this recommendation because it is unnecessary and would not result in better service to customers. The Corporate Scorecard is deployed across the Liberty Utilities Co. enterprise and is used for internal reporting. Metrics that are unique to a particular jurisdiction are not included as they are not consistent across the enterprise.

The reason cited by LCG for this recommendation is that the Balanced Scorecard does not include Estimated Bills, Billing Exceptions and Bill Accuracy. The Corporate Scorecard under “Stakeholder –

Customer, Communities and Regulators” includes the metric “Achieve Bill Accuracy,” which combines a measure of timely and accurate bills. The percent of estimated bills is evaluated each month when compiling the monthly report. The number of estimated bills has been consistently low with the exception to an increase in 2014 due to inclement weather during the winter season. In addition, both gas and electric Meter Operations departments have internal departmental goal of reading 97% of all meters. They are currently achieving over 99%.

That these specific goals are not in the Corporate Scorecard does not mean that LU is not attentive to these metrics. The fact that individual departments have goals supporting these metrics, and the fact that LU reports these metrics monthly to the Commission demonstrates LU’s focus on achieving the metrics established by the Commission.

**Conclusion #17: The lack of a Contact Center specific emergency/storm plan creates risk that planning can mitigate.**

**Conclusion #18: Business Continuity Plan for Customer Care is not sufficiently complete.**

**Recommendation #7: Update Contact Center business continuity plans and create a Call Center-specific storm plan to mitigate risk.**

LU is in the process of updating its disaster recovery plans and will update the current options for business continuity plans to incorporate the contingency that should the contact center or any of the four satellite offices become inoperable, calls will continue to be handled by the remaining facilities in state. Further, the business continuity plan will incorporate the ability to secure additional equipment to handle calls in the satellite offices and the ability to promote support through alternate channels such as the website or the interactive voice response unit.

**Conclusion #13: Customer dissatisfaction with website services has resulted from insufficient attention by management.**

**Recommendation #8: Improve web-based billing and payment self-services.**

LU has placed significant management attention to its website, culminating in a redesigned website launched in April 2016 which improves the customer’s ability to easily see their current balance and their recent payments. In the next phase of web development there is an opportunity to continue to improve the experience with more near real time payment presentation and an improved “My Account” area. A conscious decision to offer either paper or eBills was made based on vendor feedback and cost of delivering both services. LU will evaluate the opportunity to offer the customer a staggered move to eBill where they would continue to receive paper bills for a fixed period before moving exclusively to eBill. This evaluation will be completed by Q4 2016.

**Conclusion #19: Supervision at satellite offices and call monitoring have not been sufficient to support optimization of performance.**

**Recommendation #9: Increase the level of supervisory coverage in the satellite offices.**

Providing effective supervision for all four locations has created certain challenges. Recognizing this challenge, LU Customer Care has taken the following actions:

- In Q4 2014, LU created a Customer Service training position and recruited a dedicated trainer in Q4 2014 to take the training burden off of the only Customer Service Supervisor, thus increasing the time available to provide supervision.
- In Q2 2015, LU hired 2 additional supervisors to more effectively supervise our four locations.
- In Q2 2016, LU re-optimized all supervisors’ responsibilities and reallocated many reporting, administrative and quality monitoring tasks to Customer Care Analysts. This has enabled the

supervisors to focus on solely on supervision and allocate the increased time for on-site supervision at all four Customer Service locations.

Other than the two supervisors added in Q2 2015, LU notes that the actions it has taken have not added supervisory personnel; rather, their duties have been re-optimized.

**Conclusion #10: The lack of a meter data management system produces inefficiency.**

**Recommendation #10: Secure a system to manage meter reading data.**

LU's corporate office is currently undertaking a review of the enterprise business system platforms. Included within this review are meter data management features. While a meter data management system is not in place, LU has nonetheless been able to capture much of the data.

Recommendation #10 states that: 1) LU does not have a system in place to capture and retain meter (usage) readings; and 2) the lack of a meter data management system makes it difficult to develop load profiles, optimize meter reading routes, and analyze meter reading history and performance.

Despite not having a meter data management system, LU's system incorporates the following:

- Meter reading and usage history is currently stored and retrievable in the Cogsdale system.
- Load profiles are currently created utilizing 3<sup>rd</sup> party software called Lodestar.
- Optimization of meter reading routes and meter reading performance are currently managed by our Meter Operations group.
  - The routes have been well balanced and optimized over many years. New services have little impact on the length of the AMR routes, but small changes can be made manually by load data services as needed per request from the field.

Meter reading performance is tracked for each meter reading cycle as a percentage of meters read (total reads/total meters). FCS (Field Collection System) reports and Cogsdale SSRS reports are utilized to identify when the ERTs (Electronic Radio Transmitters) have failed or some other issue is hindering monthly readings.

**Conclusion #11: Procedures for addressing theft of service and unaccounted for usage are not sufficient.**

**Recommendation #11: Dedicate appropriate resources to create a revenue assurance group.**

In 2015, LU identified a need to formalize its various revenue assurance activities into its organizational structure. In 2014 and 2015, different revenue assurance activities were assigned to a number of employees who developed and implemented required processes. In Q2 2016, LU developed a formal job position and descriptions for a Revenue Assurance Analyst, which is planned to be filled in Q3 2016. Responsibilities for this position will include, but not be limited to:

- Developing, implementing and maintaining programs, policies and procedures for all aspects of Revenue Assurance. Developing and implementing inter-departmental weekly and monthly end-to-end processes to minimize revenue loss. Taking the lead to coordinate process execution with other departments, including Billing, Gas Operations and Gas Operations, to implement revenue protection and recoupment processes.
- Conducting extensive research and analysis, identifying and managing revenue leakage as a result of metering inaccuracies, billing/rate class errors, and collection activities, energy theft and

tampering. Identifying potential susceptibilities or gaps in systems, processes and operations (both field and office) through data analysis

- Designing and implementing reports, tools and dashboards for the department and executives. Creating requirements for queries to support department initiatives and investigations.
- Promote and implement procedural best practice ensuring all working practices are compliant with Liberty Utilities policies and regulatory requirements.

### III. Planning and Budgeting

**Conclusion #2: Strategic plans and five-year forecasts focus on acquisitions and organic growth initiatives to meet aggressive financial metric targets.**

LU does not agree with the conclusion as it pertains to five-year forecasts developed at the state level. The five-year forecast that is developed in New Hampshire encompasses all aspects of LU's capital and operating expense budget. The five year operating expense forecast contains details at a general ledger account level and the capital forecast contains project level detail. LU is committed to meeting the needs of key stakeholders including customers, employees, and investors. The capital projects in LU's five-year forecast include not only growth projects, but also a substantial commitment to continue improving reliability and enhancing the system to meet demand.

**Conclusion #3: Strategic plans have strategies and initiatives for operations, human resources and customer service, but specific goals and target metrics are not evident.**

**Recommendation #1: Incorporate into the Liberty Utilities' strategic plans and five-year forecasts specific operational metrics as objectives for the planning process.**

LU does not agree with this recommendation. On an annual basis, 5-year plans, annual operating budgets and key operational metrics (CSL, reliability, quality measures, safety indicators, compliance targets, etc.) are reviewed and finalized. Annual targets are set for each key indicator and loaded on a state-by-state basis into the scorecards. Scorecards are reviewed and updated monthly, communicated with all state employees at local town hall meetings. Once Scorecard metrics are established, goals are developed within each department that align with the Scorecard metrics. As discussed in the response to Recommendation #6 under Customer Service, the absence of a state-specific goal in the Corporate Scorecard does not mean that LU is not attentive to state-specific metrics.

**Conclusion #7: The CapEx budgeting process does not provide required analysis, business cases and detailed cost estimate packages prior to budget presentation to and approval by the local management, Oakville senior management, or the parent board of directors.**

**Conclusion #8: The New Hampshire capital budget packages do not provide detailed business case analysis for the growth, discretionary and regulatory supported projects as specified in the applicable Capital Expenditure Policy.**

**Recommendation #2: Redesign and rigorously apply the capital budgeting process so as to ensure the provision of full project business cases and program capital expenditure applications by September for the following budget year.**

LU will prepare preliminary business cases in conjunction with the annual budget submission, followed by formal business cases once the budget is finalized. For recurring work orders (termed "blanket projects"), there is little year-to-year variability in the number of projects and the amount of spending, thus leading to similar business cases year-to-year.

**Conclusion #9: Recent capital expense variances demonstrate a lack of effective control of capital expenditures.**

**Recommendation #3: Manage the capital budgets to annual variance tolerances of plus or minus 5 percent for total expenditures and plus or minus 20 percent for individual projects and line items.**

LU is continuing to improve monitoring and controlling of actual capital costs as compared to budgeted costs, not only on specific projects but in total. However, the variances that occurred in 2014 and 2015 were not the result of a lack of control over the spending process. To the contrary, the actual spending was the result of local decision-making and flexibility as circumstances changed. If there had been a strict limit on either total spending or on individual project spending, LU may have been in a position where it could not provide service to new customers as a result of budget constraints. That situation would clearly have been a negative outcome. LU understands the need to control capital spending, tempered by the realities of the situation and changed circumstances as compared to the anticipated circumstances at the time of budget preparation.

**Conclusion #10: New Hampshire and Oakville management did not effectively monitor and control problems with capital budget timing or 2014 and 2015 capital expenditure performance.**

**Conclusion #11: New Hampshire executive management and Oakville executive management did not take action to mitigate problems with capital budget process timing and reconciliations of 2014 capital expenditure performance.**

**Recommendation #4: Change monthly and year-end management reporting processes to include monitoring and detailed analysis of capital expenditure spending and variances.**

LU does not agree that capital budgets were not monitored, nor do we agree with the characterization that there were “problems” with budget timing and performance. There was full visibility and business case documentation for the 2014/2015 projects. The capital budget was vetted and discussed with local management and head office management. The business cases included project analysis and in some cases Commission approval. When determining capital needs, Electrical and Gas Planners use SAIDI and SAIFI Metrics as objectives for the planning process. Other considerations include specific programs and projects, which frequently have studies to support the project and often Commission Staff collaboration or approval. Recurring work orders are captured under what we term “Blanket Projects” and are budgeted based on historical spending levels adjusted for known and measureable changes.

Notwithstanding this, LU acknowledges the need for continuous improvement in the capital budgeting process, and embraces continuous improvement as one of LU’s core values. In an effort to improve its budgeting process, LU has implemented the following policies:

- Reinforced monthly budget meetings
- Increased the level of detail that is reviewed
- A dedicated individual has been hired to manage and review the capital budget and spending
- Month end accruals are now recorded at a job level to provide better visibility to job spending
- Project governance documents are submitted in a timely fashion

**Recommendation #5: Replace the monthly “operating call” presentations and year-end management reporting processes with Oakville with a more structured, documented monitoring and detailed analysis of capital expenditure spending and variances.**

LU disagrees with this recommendation. The monthly operating call is part of a larger process that is used to run the business. During the monthly operating call, there is a review of year-to-date capital spending against budget along with a forecast to the end of the year. Any major variances are discussed. More in-depth detailed capital analysis is performed at the business unit level in accordance with the

capital expenditure planning and management policy. Additionally, Scorecard and operating statistics are reviewed during this call. The process includes the use of flash reports, state reports, monthly operating calls and quarterly face-to-face sessions (in addition to the monthly operations reviews that are held locally). Discussions of capital projects variances and forecasts are included in this process.

#### IV. Information Technology

**Conclusion #1: Growth has strained the capability of APUC's model for providing IT support to continue supporting New Hampshire needs.**

**Recommendation #1: Re-evaluate the current IT strategy.**

We agree to the extent that while significant transition projects were underway, it was more challenging to simultaneously provide support to applications already in production. It is well established that there is a stabilization period after a new system implementation, particularly a CIS implementation, and LU experienced this in the Granite State and EnergyNorth implementations. As both the operational and IT performance statistics show, LU began to move beyond the stabilization period in 2015. The volume and severity of IT tickets has diminished, and there has been a corresponding improvement in operational performance metrics for processes that are heavily IT-dependent, such as billing. By centralizing the IT application support functions, and relying on COTS vendors, LU believes that it has been more successful in stabilizing and enhancing the applications than would have been the case if a different IT delivery strategy had been implemented.

LCG appears to endorse the Liberty Utilities IT delivery strategy, stating that:

“It is common among public utility holding companies (PUHCs) in the United States to assign most IT responsibilities to a corporate organization”

and

“It is common today for PUHCs owning U.S. utilities to depend largely on commercial off-the-shelf (COTS) software rather than the traditional internally developed legacy systems to provide the automated operations support necessary to support utility functions, whether operations and engineering or customer support and billing, financial operations, and other so-called enterprise functions. It is also increasingly common for such PUHCs to provide as much as possible a common set of support systems across all its subsidiary utilities and to use vendors, particularly third-party integrators, for software customization, initial installation, and major upgrades.”

The issues raised in the audit appear to suggest a re-evaluation of the applications used by LU, rather than a re-evaluation of the IT delivery and organization strategy (*see*, e.g., conclusion #2 and recommendation #2). As a result we do not agree with recommendation #1.

**Conclusion #2: Limitations in some software applications have impaired the quality of some of the LU-NH utilities' operations.**

**Recommendation #2: Re-evaluate the adequacy and robustness of the current software applications.**

The applications in question (primarily GP, Key2Act and Cogsdale) do not have the same functionality and generate increased manual work relative to more sophisticated 'tier one' applications. However, LU notes that the applications it has chosen, or similar applications, are used by significant numbers of 10,000-100,000 customer utilities, where it is quite unusual to see tier one applications deployed because of the increased cost associated with them, both for implementation and for ongoing operation. LU also

notes that the relatively small size of the vendors in question, especially Cogsdale, and the relative importance of Liberty Utilities as a customer, has meant that the vendor is more responsive to LU's requests than a larger vendor would be. As a result we have seen, and expect to continue to see, more rapid enhancement and improvement of the application than would be experienced from a larger vendor.

However, the continued growth of Liberty Utilities, particularly with the pending acquisition of The Empire District Electric Company, has indeed caused Liberty Utilities to assess the adequacy of the current finance and CIS applications and we plan to conclude such a review early in 2017. Any changes to applications as a result of such a review would obviously take a few years to implement from the date that the review is completed.

**Conclusion #3: Despite significant resource increases, the sufficiency of IT resources remains questionable.**

**Recommendation #3: Ensure that the importance of maintaining sufficient IT resources to support all the LU utilities including those in New Hampshire is a key part of APUC's strategic plans and annual budget process**

The basis for this conclusion and recommendation is unclear. The conclusion acknowledges that the organization has tripled in size since 2012, which is roughly in proportion to the growth in Liberty Utilities itself. The facts offered to support the conclusion are:

- Size of Liberty's IT organization relative to that of other comparable utilities
- The fact that the number of open Cogsdale tickets has remained relatively constant, and the average age of tickets in backlog has increased.

In our assessment, the size of the Liberty Utilities IT organization is at the low end of the range of similarly sized utilities; however, the size of the organization will continue to increase, particularly after the absorption of the Empire IT organization, which is of similar size to that of Liberty's IT organization.

Conclusion #7 related to Cogsdale ticket volumes and aging is addressed below, but we do not believe that the observations in the report point to a need to add resources at the present time.

We continue to assess the adequacy of resources, using the IT demand metrics (work intakes, ticket volumes, etc.) as a significant input, as well as assessing where we have skill gaps or exposure to risk if specific individuals were to leave, as part of the annual budgeting process.

**Conclusion #4: The vendor management process lacks sufficient systemization and formal documentation.**

**Recommendation #4: Develop and document a management process to apply to all key vendors**

While we believe that a 'one-size fits all' approach is not appropriate given the diverse nature of the vendors, and the significant differences in the nature, services and expectations for each vendor, a more formalized standard is being developed which would then be applied on a tailored basis to each key vendor, in priority sequence.

Notwithstanding the comments in the report, the performance of key vendors, particularly Cogsdale, has been very closely monitored including weekly meetings and status reports as demonstrated to LCG in response to various data requests. It is also important to reinforce, as is noted in conclusion #9, that there is a standard security addendum which is in place for all contracts with applicable IT vendors.

**Conclusion #5: Despite progress made in improving and systemizing support processes, some gaps remain, and documentation is incomplete and inconsistent.**

**Recommendation #5: Improve the definition and documentation of IT processes**

As LCG has noted, the IT organization has grown rapidly and has made significant progress in the last 2 years in organization and process definition, further work continues in this area. For example this year we are focused on the incident management process as a target for greater definition and staff training. Other processes will be analyzed and appropriate changes and definition of those processes will be made over time.

**Conclusion #6: IT group performance measurements, despite recent additions, remain more narrow than appropriate.**

**Recommendation #6: Increase the number and detail of the IT and vendor performance measurements**

As our IT organization has matured we have added more detail to our performance measurements, and intend to continue to do so, as well as increasing the number and scope of performance measurements.

**Conclusion #7: Trends in Cogsdale-related trouble tickets indicate some stabilization of the Cogsdale CIS system but raise concerns about the trouble ticket resolution process.**

The trend in Cogsdale-related trouble tickets is positive – as noted by LCG, the total volume of new tickets has come down since the beginning of 2015, and the number of new tickets created in New Hampshire has decreased even more than the total number. Furthermore, the severity of tickets has decreased, such that since July 2015, 10 or fewer critical tickets were raised per month, and in many months 1 or none of those were assigned to Cogsdale – meaning that critical issues were typically technical, configuration or service requests (e.g., for a process rollback) vs. application or data fixes.

In addition, the percentage of new tickets that are assigned to Cogsdale has remained relatively constant at around 30% of all new tickets.

With respect to the aging of tickets, the report correctly points out that the number of Cogsdale tickets in backlog has remained relatively constant at around 350 while the number of those outstanding tickets that are more than 90 days old has increased to around 250. However, this is partly attributable to the fact that, since the original transitions, we have not ‘purged’ the system of tickets that are no longer relevant and should be closed. As a result there are a number of stale tickets that have been open for a considerable period, thus contributing to the increase in overall aging of tickets. With the completion of the upgrade, we are now undertaking a purge to ensure that the tickets that remain open are still relevant. The most current data shows that there are 353 open tickets (vs. 396 at the end of June), and of those, 108 are in the category ‘closed pending business confirmation’ vs. 85 in that category at the end of June.

**Conclusion #8: The Company has developed disaster recovery procedures and has performed initial testing of these after their implementation, but has no regular testing process.**

**Recommendation #7: Develop a unified disaster recovery plan, and develop and execute plans for regular testing of the disaster recovery procedures.**

We will begin implementing this recommendation during 2017.

**Conclusion #9: LU has improved its approach to cybersecurity but needs to continue to focus on this matter.**

**Recommendation #8: Conduct a new cybersecurity audit once the current remediation efforts are complete.**

We agree that a continued focus on cybersecurity is important. Our primary focus is to arrive at a standard approach to cybersecurity that is acceptable to all stakeholders, so as to reduce the cost of security to each business unit while providing a more consistent and comprehensive approach. LU plans to conduct periodic assessments and reviews of cybersecurity at a corporate level, as one would expect of a utility company of Algonquin's size and scope.

#### V. Accounting

**Conclusion #1: Accounting procedures and documentation are generally sufficient, but a formal accounting policy and procedures manual remains to be completed.**

**Recommendation #1: Complete and keep current a formal accounting manual that includes supporting accounting procedures.**

The head office finance team will continue updating and completing all sections of the accounting manual. Completion of the remaining sections of the manual is planned for June 2017, with the exception of the revenue and lease sections. These two sections will be heavily impacted by recently released FASB accounting standard updates, ASU 2014-09, Revenue from Contracts with Customers, and ASU 2016-02, Leases, which are effective on January 1, 2018 and 2019, respectively. As a result, completion of these two accounting manual sections will be finalized by December 31, 2017, in conjunction with the adoption of the new accounting standards. APUC further agrees that the accounting manual and the detailed procedures should be either linked or stored together.

**Conclusion #2: Management's use of manual and third-party supplied capabilities does not appear to make optimal use of the capabilities and features of its GP accounting system.**

**Recommendation #2: Perform a structured evaluation of the use of more core GP modules to minimize manual processes and the use of third-party applications.**

LU is currently reviewing and analyzing possible replacements of the current ERP system (Great Plains) with a potential change taking place in the next 2 to 3 years. If a decision is made to maintain the GP system, then LU will investigate the implementation of additional modules.

**Conclusion #3: Gaps exist in documentation of the financial system.**

**Recommendation #3: Develop a data process flow document that charts the integration of billing transactions created in the Cogsdale CIS and recorded to the GP General Ledger accounts.**

Our work on this task is underway and we expect to complete it by the end of 2017.

**Conclusion #3: Gaps exist in documentation of the financial system.**

**Recommendation #4: Develop an updated enhanced platform/system document that shows the accounting systems, data bases and platforms and how they interface with each other in a clear manner.**

Our work on this task is underway and we expect to complete it by the end of 2017.

**Conclusion #5: The lack of a separate financial data repository to support management analysis and reporting purposes is inefficient.**

**Recommendation #5: Develop a financial data repository separate from the General Ledger.**

Corporate Finance is in the process of providing a Reporting Server which will be used to address all financial reporting requirements. This server will eliminate the unnecessary load that is currently on the production database. The server has been created and corporate personnel are currently working with the infrastructure group to optimize its capabilities. The plan is to roll out the necessary reports and user accesses in the near future.

**Conclusion #6: There has not been sufficient internal auditing of matters affecting New Hampshire operations.**

**Recommendation #6: Address the risk exposure and assessment processes that routinely fail to identify high-priority New Hampshire utility work for Internal Audit.**

As the corporate Internal Audit department continues to grow, mature and expand resourcing, greater regional focus and support for New Hampshire will become possible. The planned continued department growth and maturity will enhance the department's ability to expand focus and activities down from the enterprise level to the regional level. Internal Audit is familiar with IIA standard 1300 and will increase the formalization of such a program once it is deemed that the department's maturity has reached a level for which the program would benefit the practices of the department. We agree that the guide is a useful support document in developing the activities of the Internal Audit department and an important reference tool in planning and executing Internal Audit's department strategy.

**Conclusion #10: Corporate accounting and finance resources support the New Hampshire utilities' work levels, but are lacking in robust expertise in U.S. regulatory accounting.**

**Recommendation #7: The corporate finance department should make working knowledge of the U.S. regulatory accounting and rate case filing process a primary criterion for recruiting, securing, and retaining talent.**

LCG states that, "the Canadian corporate accounting and finance personnel do not have expertise in U.S. regulatory accounting requirements, reporting, and rate case preparation." We disagree with this assertion. There are three senior-level employees that have expertise in U.S. regulatory accounting requirements and reporting and have supported rate case preparation activities. In addition we note that in the case of rate case preparation, the state utilities are responsible for rate case preparation with support received when necessary. As described above, the Oakville corporate finance department's primary responsibility is to set and administer policies and procedures and provide finance support to the U.S. entities.

LCG also states that, "we observed for the Canadian staff no formal training or knowledge-transfer programs (taking advantage of the body of U.S. resources that exist at the operating utility level)." While there are no formal job sharing programs, knowledge transfer occurs on a routine basis through ongoing communication as well as at least annually through formal training. For example, in 2014 there was a finance symposium that brought together Liberty Utilities finance leaders and staff in person for training on U.S. regulatory accounting requirements and company policies and procedures. Additionally, in 2015 for example, the finance team held conference calls at least quarterly. Similarly, symposiums bringing together the Customer Care and Regulatory teams were held in 2016.

We recognize that there are always opportunities to improve knowledge and understanding of U.S. regulated accounting, reporting and rate case processes, and to this end, already conducted over 10 site

visits of Liberty Utilities U.S. sites in 2016. We will evaluate formal job sharing or temporary assignments for finance staff and consider implementing such programs.

## VI. APUC at a Crossroads

**Conclusion #1: APUC can no longer rely on a continuation of its corporate structure as the optimum means for providing New Hampshire with optimum planning and budgeting, customer service, and IT.**

**Recommendation #1: Conduct a formal, structured examination of organizational, staffing, and system needs for providing support to New Hampshire operations.**

The board continually evaluates the organizational needs of the businesses owned and operated by APUC. The corporate structure at APUC and Liberty is continuously evaluated to ensure that it remains effective and efficient as it continues to grow. The announced transaction of Empire District Electric Company will represent a significant expansion of the overall Liberty operation. Thus an evaluation of the overall structure and the delivery of services throughout the organization will be completed to ensure that effective and efficient delivery of services continues throughout the organization, and, ultimately, to our customers.

The APUC Board of Directors consists of senior executives and business leaders with broad experience in North American utilities regulation and other fields. Specifically, the following external board members have vast U.S. based utilities experience including:

- 1) Ms. Masheed Saidi who until 2010 was the Chief Operating Officer and Executive Vice President of U.S. Transmission for National Grid USA. Ms. Saidi previously served on the Board of Directors on the Northeast Energy and Commerce Association.
- 2) Ms. Dilek Samil who brings over 30 years of finance, operations and business experience in the regulated energy utility sector. During her career Ms. Samil was the Executive Vice President and Chief Operating Officer of NV Energy and gained considerable experience in generation and system operations as President and Chief Operating Officer for CLECO Power.
- 3) Mr. Christopher Huskilson who is currently the President and Chief Executive Officer of Emera Inc., a North American energy and services company, a position he has held since November 2004. Since 1980, Mr. Huskilson has held a number of positions within Nova Scotia Power Inc. and is currently a Director of Emera Inc. and Nova Scotia Power Inc. He is also the Chairman of Bangor Hydro-Electric Company and serves on the board of Emera Maine.

In addition to the seasoned utility executives mentioned above, three members of APUC's senior management team, Mr. Ian Robertson, Mr. Chris Jarratt, and Mr. David Bronicheski each have over 15 years of experience managing and operating US based regulated utilities.

The corporate model ensures that anything that affects customers and the regulatory environment is delivered locally with a locally based leadership team. As we evolve our organization our plan is to continue this operating model. Business strategy and system decisions will be made in our corporate offices, while execution of these strategies will be done by our local operating team. Staffing levels are set locally based on the needs of the business. One of the organizational enhancements underway for 2017 will be to create a regional board of directors who will have an independent director who will be a New England resident.

## VII. Summary

LU appreciates the opportunity to provide comments on LCG's report. The report and our responses demonstrate that LU has accomplished a great deal in a very short period of time, and continues to focus on improving its operations. In this spirit, LU will continue to work on the plans and programs as described herein and looks forward to continued strong working relationships with Commission Staff.